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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/648,531

08/23/2000

Allen L. Frazier

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5682

7590

03/29/2004

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Intellectual Property Administration
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EXAMINER

BRINICH, STEPHEN M

ART UNIT

PAPER NUMBER

2624

DATE MAILED: 03/29/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/648,531

Applicant(s)

FRAZIER ET AL.

Examiner

Stephen M Brinich

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- * Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,6-11,16,17 and 21 is/are rejected.
- 7) ☒ Claim(s) 2-5,12-15,18,19 and 22 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

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DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 6-7, 10-11, 16-17, & 20-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Towner et al (5929892).

Re claims 1, 6, 10, 16, & 17, Towner et al. discloses (Figure 14; column 15, line 60 - column 16, line 20) an image printer in which a size for each printed dot is determined on the basis of image data pertaining to dot position (in this case, position relative to a character edge) and dot density (black within the character outline, white outside the character outline).

Re claim 7, Towner et al. discloses the use of a laser printer.

Re claims 11 & 21, the determination that a given dot position lies along a character edge inherently requires determination of dot density in the neighborhood of that position (dot positions having "black" density to one side and

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"white" density on another are edge positions; dot positions surrounded by all "black" or all "white" are not edge positions).

Re claim 20, Towner et al. discloses (column 18, lines 45-46) that the disclosed arrangement of dot size control may be implemented in a combination of hardware and software (the latter inherently comprising computer-readable instructions on some type of recording medium).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Towner et al. in view of Applicant's admitted Prior Art.

Re claims 8-9, Towner et al. discloses the use of a laser printer rather than an inkjet printer as the means for placing dots representing image data onto a document. The use of inkjet printers and facsimile machines to perform this function is well

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known in the art as described by Applicant (page 1, lines 5-21). The use of the Towner et al. dot size variation scheme in order to produce sharper character printouts in an inkjet printer or a facsimile machine would be an expedient obvious to one of ordinary skill in the art.

Allowable Subject Matter

5. Claims 2-5, 12-15, 18-19 & 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter:

Re claims 2, 12, 18, & 22 (and dependent claims 3-5, 13-15, & 19), the art of record does not teach or suggest a determination of a dot size based on a count of dots in a local square matrix in conjunction with dot location.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Gall and Wallace disclose further examples of image reproduction using dot size modulation.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen


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M. Brinich at 703-305-4390. The examiner can normally be reached on weekdays 7:00-4:30, alternate Fridays off.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Tech Center 2600 Customer Service center at 703-306-0377.

If attempts to contact the examiner and the Customer Service Center are unsuccessful, supervisor David Moore can be contacted at 703-308-7452.

Faxes pertaining to this application should be directed to the Tech Center 2600 official fax number, which is 703-872-9306.


Stephen M Brinich
Examiner
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smb
March 22, 2004